INDEX TO VOLUME XLIX, 1937

PAGE

Admiralty Type Test for Compression-Ignition Engines (Note) 456
Again Coiled (Note) 461
Almost Elemental (Note) 623
Alternating Current Motors Controlled by Mutators, by S. M. Robinson 153
Annealing of Welded Work (Note) 254
Annual Banquet, 1937, American Society of Naval Engineers 215
Association Notes 124, 271, 465, 634
Auxiliary Machinery, Foundations for, by Leonard Kaplan 550
Ball Bearing, Smallest in the World (Note) 114
Banquet, Annual, 1937, American Society of Naval Engineers 215
Battleship, Motor, Germany's Latest (Note) 118
Boiler Feed Water, Deaeration of, by R. W. Bruner 127
Boiler Oil and Diesel Fuel, Relative Prices of (Note) 116
Boilers, Water Circulation in (Note) 620
Boilers for High-Speed Ships, Lightweight (Note) 99
Book Review, "Jane's Fighting Ships, 1936" 115
Book Reviews—
"Tsushima" 120
Cugle's Two-Minute Azimuths, Vol. II 121
Deterioration of Structures of Timber, Metal and Concrete Exposed to the Action of Sea-Water 121
Lange's Handbook of Chemistry 632
Marine Electric Power 632
Oil Burning 633
Radio Amateur's Handbook 122
Tanker Technique, 1700-1936 123
Bowen, H. G., Rear Admiral, U. S. N., The Relation of Engineering to National Defense 31
Bowen, H. G., Rear Admiral, U. S. Navy, One Hundred Years of United States Naval Engineering History 487
Bruner, R. W., Lieut. Commander, U. S. N., The Deaeration of Boiler Feed Water 127
Calculation Methods for Power Circuits Using Electron Tubes, by S. M. Robinson 324
Camera, High Speed, Model Basin, for Propeller Research, by E. L. Gayhart 174
Cassey, T. E., Molds for Phenol Resinoids 390

INDEX TO VOLUME XLIX, 1937

PAGE

Admiralty Type Test for Compression-Ignition Engines (Note) 456
Again Coiled (Note) 461
Almost Elemental (Note) 623
Alternating Current Motors Controlled by Mutators, by S. M. Robinson 153
Annealing of Welded Work (Note) 254
Annual Banquet, 1937, American Society of Naval Engineers 215
Association Notes 124, 271, 465, 634
Auxiliary Machinery, Foundations for, by Leonard Kaplan 550
Ball Bearing, Smallest in the World (Note) 114
Banquet, Annual, 1937, American Society of Naval Engineers 215
Battleship, Motor, Germany's Latest (Note) 118
Boiler Feed Water, Deaeration of, by R. W. Bruner 127
Boiler Oil and Diesel Fuel, Relative Prices of (Note) 116
Boilers, Water Circulation in (Note) 620
Boilers for High-Speed Ships, Lightweight (Note) 99
Book Review, "Jane's Fighting Ships, 1936" 115
Book Reviews—
"Tsushima" 120
Cugle's Two-Minute Azimuths, Vol. II 121
Deterioration of Structures of Timber, Metal and Concrete Exposed to the Action of Sea-Water 121
Lange's Handbook of Chemistry 632
Marine Electric Power 632
Oil Burning 633
Radio Amateur's Handbook 122
Tanker Technique, 1700-1936 123
Bowen, H. G., Rear Admiral, U. S. N., The Relation of Engineering to National Defense 31
Bowen, H. G., Rear Admiral, U. S. Navy, One Hundred Years of United States Naval Engineering History 487
Bruner, R. W., Lieut. Commander, U. S. N., The Deaeration of Boiler Feed Water 127
Calculation Methods for Power Circuits Using Electron Tubes, by S. M. Robinson 324
Camera, High Speed, Model Basin, for Propeller Research, by E. L. Gayhart 174
Cassey, T. E., Molds for Phenol Resinoids 390

PAGE
Cassey, T. E., The Problem of the Phenol Resinoids 65
Cast Crankshafts (Note) 461
Cavitation and Vibration, Propeller (Note) 113
Cavitation, Revolutions, Pitch and Diameter, Relation of in the Marine Propeller, by H. H. Curry 201
Chadwick Guy, Commander, U. S. N., Proprietary Purchase 184
Circulation, Water, in Boilers (Note) 620
Cold Work, Effect of on the Corrodibility of Cast Corrosion Resistant Steel in Salt Spray and Nitric Acid, by Joseph A. Duma 566
Colors for Signal Lights, Selection of (Note) 110
Compression-Ignition Engines, Admiralty Type Test for (Note) 456
Condenser Pressures of Naval Condensers, Estimation of, by John R. Weske 17
Control of Pitch Diameter of Bolts and Nuts to be Galvanized (Note) 458
Corrodibility of Cast Corrosion Resistant Steel in Salt Spray and Nitric Acid, Effect of Cold Work on, by Joseph A. Duma 566
Corrosion of Iron and Steel in Sea-Water—Resumé (Note) 82
Corrosion Resistant Steel, Cast, in Salt Spray and Nitric Acid, Effect of Cold Work on the Corrodibility of, by Joseph A. Duma 566
Corrosion Tests of Welded Low-Carbon Stainless Steel (Note) 270
Cost Accounting, A Definition, by J. B. Rhodes 57
Costs for New Destroyers (Note) 627
Cracks at Rivet Holes, Detecting (Note) 114
Crankshafts, Cast (Note) 461
Cruising Diesel Engines in German Warships (Note) 111
Cugle's Two-Minute Azimuths, Vol. II (Book Review) 121
Curry, H. H., Lieut. Commander, U. S. Coast Guard, A Relation of Revolutions, Pitch, Diameter and Cavitation in the Marine Propeller .. 201
Cutting Weights in Warships (Note) 269
Deaerated Feedwater (Note) 624
Deaeration of Boiler Feedwater, by R. W. Bruner 127
Design of Destroyers (Note) 111
Design of Fuel Oil Piping for Marine Purposes, by John A. Raidabaugh 502
Destroyers, Design of (Note) 111
Detecting Cracks at Rivet Holes (Note) 114
Deterioration of Structures of Timber, Metal and Concrete Exposed to the Action of Sea-Water (Book Review) 121
Detonating Petrol Engines, Stationary Gas Waves in (Note) 265
Development of the Two-Stroke Oil Engine (Note) 241
Developments in Plastics (Note) 90
Diesel Engine Development, United States Navy Participation in (Note) 590
Diesel Engines, in German Warships, Cruising (Note) 111
Diesel Fuel and Boiler Oil, Relative Prices of (Note) 116
Direct Current Power Transmission, by S. M. Robinson 1

PAGE

Dreller, Louis, Lieut. Commander, U. S. N., The Fundamentals of Parallel Operation of Direct and Alternating Current Generators 273
Duma, Joseph A., Effect of Cold Work on Corrodibility of Cast Corrosion Resistant Steel in Salt Spray and Nitric Acid 566
Effect of Cold Work on the Corrodibility of Cast Corrosion Resistant Steel in Salt Spray and Nitric Acid, by Joseph A. Duma 566
Engine, Diesel, Development, United States Navy Participation in (Note) 590
Engineering, Relation of to National Defense, by H. G. Bowen 487
Engineering, United States Naval, One Hundred Years of History of, by H. G. Bowen 487
Engine Rooms, Noise in (Note) 266
Estimation of Condenser Pressures of Naval Condensers, by John R. Weske 17
Explosion Proof Electrical Equipment, What Is? by E. F. Seaman 48
Feedwater, Deaerated (Note) 624
Firebrick Linings (Note) 264
For Scholarly Readers (Note) 117
Foundations for Auxiliary Machinery, by Leonard Kaplan 550
Frictional Resistance, Increase in, Due to the Action of Water on Bottom Paints, by E. A. Stevens, Jr 585
Fuel for the Navy's Diesels (Note) 452
Fuel Oil Piping for Marine Purposes, Design of, by John A. Raidabaugh 502
Fuels of Today and Tomorrow (Note) 615
Fundamentals of Parallel Operation of Direct and Alternating Current Generators, by Louis Dreller 273
Gayhart, E. L., Commander (CC), U. S. N., The Model Basin High Speed Camera for Propeller Research 174
Gearing, Marine, Sound and Vibration in, by Austin Kuhns 375
Generators, Direct and Alternating Current, Fundamentals of Parallel Operation of, by Louis Dreller 273
Germany's Latest Motor Battleship (Note) 118
German Shipbuilding (Note) 458
German Warships, Cruising Diesel Engines in (Note) 111
Harmonic Induction Engine, The Petter (Note) 98
High Speed Steam Turbines (Note) 447
Hydrostatic Testing (Note) 459
Increase in Frictional Resistance Due to the Action of Water on Bottom Paints, by E. A. Stevens, Jr 585
Induction Engine, Harmonic, Petter (Note) 98
Inspecting Without Doing Damage (Note) 622
Inventive Genius, Naval Engineering, Roll of Honor of 39
Iron and Steel, Corrosion of in Sea-Water—Resumé (Note) 82
"Jane's Fighting Ships, 1936," Book Review 115

PAGE

Kaplan, Leonard, Lieut. Commander (CC), U. S. N., Foundations for Auxiliary Machinery 550
Kort Nozzles, Twin-screw Tug with (Note) 460
Kuhns, Austin, Sound and Vibration in Marine Gearing 375
Kuhns, Austin, Sound and Vibration in Marine Gearing, Part II 469
Labberton, J. M., Lieut. Commander, U. S. N. R., A Method of Determining Propeller Pitch for the Inboard and Outboard Propellers of a Four-Screw Ship 576
Lange's Handbook of Chemistry (Book Review) 632
Lights, Signal, Selection of Colors for (Note) 110
Lightweight Boilers for High-Speed Ships (Note) 99
Linings, Firebrick (Note) 264
Listard Process—Progress in Liner Wear Reduction (Note) 93
Ljungström Noncondensing Turbine Locomotive, Performance of (Note) 113
Machine Gun Molding (Note) 268
Machinery, Auxiliary, Foundations for, by Leonard Kaplan 550
Machinery of the *Scharnhorst, Potsdam* and *Gneisenau* (Note) 251
Marine Electric Power, by Q. B. Newman (Book Review) 632
Marine Gearing, Sound and Vibration in, by Austin Kuhns 375
Marine Gearing, Sound and Vibration in, Part II, by Austin Kuhns 469
Marine Propeller, A Relation of Revolutions, Pitch, Diameter and Cavitation in, by H. H. Curry 201
Metallurgy and the Aero Engine (Note) 607
Metals We Eat (Note) 630
Method of Determining Propeller Pitch for the Inboard and Outboard Propellers of a Four-Screw Ship, by J. M. Labberton 576
Micro-Gap Switch, The (Note) 95
Micrurgy, Some Comments on (Note) 629
Model Basin High Speed Camera for Propeller Research, by E. L. Gayhart 174
Modern Steam Conditions, Steel for (Note) 111
Molding, Machine Gun (Note) 268
Molds for Phenol Resinoids, by T. E. Cassey 390
Motor Battleship, Germany's Latest (Note) 118
Motor Torpedo Boats, The New (Note) 629
Motorist's Slide Rule (Note) 86
Motors, Alternating Current, Controlled by Mutators, by S. M. Robinson 153
Mutators, Alternating Current Motors Controlled by, by S. M. Robinson 153
National Defense, Relation of Engineering to, by H. G. Bowen 31
Naval Condensers, Estimation of Condenser Pressures of, by John R. Weske 17
Naval Construction, Trend of (Note) 234
Naval Engineering Inventive Genius, Roll of Honor of 39

PAGE

Naval Engineering, United States, One Hundred Years of History of, by H. G. Bowen ... 487
Naval Shipbuilding Program Benefits Entire Country (Note) ... 112
Navigation, Supersonic Waves for (Note) ... 268
Navy's Diesels, Fuel For The (Note) ... 452
New Destroyers, Costs for (Note) ... 627
New Motor Torpedo Boats (Note) ... 629
Noise (Note) ... 628
Noise in Engine Rooms (Note) ... 266
Normandie's New Record (Note) ... 267
Nuts and Bolts to be Galvanized, Control of Pitch Diameter of (Note) 458
Oil Burning (Book Review) ... 633
Oil Engine, Two-Stroke, Development of (Note) ... 241
One Hundred Years of United States Naval Engineering History, by H. G. Bowen ... 487
Parallel Operation of Direct and Alternating Current Generators, Fundamentals of, by Louis Dreller ... 273
Performance of the Ljungström Noncondensing Turbine Locomotive (Note) ... 113
Petrol Engines, Detonating, Stationary Gas Waves in (Note) ... 265
Petter Harmonic Induction Engine, The (Note) ... 98
Phenol Resinoids, Molds For, by T. E. Cassey ... 390
Phenol Resinoids, The Problem of the, by T. E. Cassey ... 65
Piping, Fuel Oil for Marine Purposes, Design of, by John A. Raidabaugh 502
Pitch, Propeller, Method of Determining for the Inboard and Outboard Propellers of a Four-Screw Ship, by J. M. Labberton ... 576
Plastics, Developments in (Note) ... 90
Propeller Pitch, Method of Determining for the Inboard and Outboard Propellers of a Four-Screw Ship, by J. M. Labberton ... 576
Power Circuits, Calculation Methods for, Using Electron Tubes, by S. M. Robinson ... 324
Power Transmission, Direct Current, by S. M. Robinson ... 1
Preservation, Wood (Note) ... 267
Problem of The Phenol Resinoids, by T. E. Cassey ... 65
Progress in Liner Wear Reduction—The Listard Process (Note) ... 93
Propeller Cavitation and Vibration (Note) ... 113
Propeller Protection (Note) ... 262
Propellers, Singing (Note) ... 258
Proprietary Purchase, by Guy Chadwick ... 184
Protected Screening of Radium During Transportation (Note) ... 463
Protection, Propeller (Note) ... 262
Purchase, Proprietary, by Guy Chadwick ... 184
Raidabaugh, John A., Design of Fuel Oil Piping for Marine Purposes 502
Radio Amateur's Handbook, 1937 (Book Review) ... 122
Radium From the Arctic Circle (Note) ... 262

PAGE
Radium, Protected Screening of, During Transportation (Note) 463
Reduction, Liner Wear, Progress in—The Listard Process (Note) 93
Regulating Superheat Temperature (Note) 266
Relation of Engineering to National Defense, by H. G. Bowen 31
Relation of Revolutions, Pitch, Diameter and Cavitation in the Marine Propeller, by H. H. Curry 201
Relative Prices of Boiler Oil and Diesel Fuel (Note) 116
Residual Stress, by William C. Stewart 307
Resinoids, Phenol, The Problem of, by T. E. Cassey 65
Resinoids, Phenol, Molds For, by T. E. Cassey 390
Resistance, Frictional, Increase in, Due to the Action of Water on Bottom Paints, by E. A. Stevens, Jr. 585
Rhodes, J. B., Commander, U. S. N. (Ret.), Cost Accounting, a Definition 57
Robinson, S. M., Rear Admiral, U. S. N., Direct Current Power Transmission 1
Robinson, S. M., Rear Admiral, U. S. N., Alternating Current Motors Controlled by Mutators 153
Robinson, S. M., Rear Admiral, U. S. N., Calculation Methods for Power Circuits Using Electron Tubes 324
Roll of Honor of Naval Engineering Inventive Genius 39
Scharnhorst, Potsdam and *Gneisenau*, Machinery of (Note) 251
Scholarly Readers (Note) 117
Seaman, E. F., What Is Explosion Proof Electrical Equipment? 48
Selection of Colors for Signal Lights (Note) 110
Shipbuilding, German (Note) 458
Shipbuilding Program, Naval, Benefits Entire Country (Note) 112
Shipbuilding, World's, from 1893 to 1936, Table Showing (Note) Facing 262
Singing Propellers (Note) 258
Slide Rule, The Motorist's (Note) 86
Smallest Ball Bearing in the World (Note) 114
Some Comments on Micrurgy (Note) 629
Sound and Vibration in Marine Gearing, by Austin Kuhns 375
Sound and Vibration in Marine Gearing, Part II, by Austin Kuhns 469
Stainless Steel, Welded Low-Carbon, Corrosion Tests of (Note) 270
Stationary Gas Waves in Detonating Petrol Engines (Note) 265
Steam Turbines, High Speed (Note) 447
Steamotive (Note) 78
Steel for Modern Steam Conditions (Note) 111
Stevens, E. A., Jr., Increase in Frictional Resistance Due to the Action of Water on Bottom Paints 585
Stewart, William C., Residual Stress 307
Stress, Residual, by William C. Stewart 307

PAGE
Superheat Temperature, Regulating (Note) 266
Supersonic Waves for Navigation (Note) 268
Switch, Micro-Gap, The (Note) 95
Table Showing The World's Shipbuilding from 1893 to 1936 (Note) Facing 262
Tanker Technique, 1700-1936, by B. Orchard Lisle (Book Review) 123
Television (Note) 247
Test, Admiralty Type, for Compression-Ignition Engines (Note) 456
Testing, Hydrostatic (Note) 459
Torpedo Boats, The New Motor (Note) 629
Trend of Naval Construction (Note) 234
Tsushima, by A. Novikoff-Priboy, Book Review 120
Turbine Locomotive, Noncondensing, Ljungström, Performance of (Note) 113
Twin-screw Tug with Kort Nozzles (Note) 460
Two-Stroke Oil Engine, Development of (Note) 241
United States Navy Participation in Diesel Engine Development (Note) 590
Vibration and Cavitation, Propeller (Note) 113
Warships, Cutting Weights in (Note) 269
Water, Boiler Feed, Deaeration of, by R. W. Bruner 127
Water Circulation in Boilers (Note) 620
Waterside, Welding at (Note) 602
Waves, Supersonic, for Navigation (Note) 268
Welded Low-Carbon Stainless Steel, Corrosion Tests of (Note) 270
Welded Work, Annealing of (Note) 254
Welding at Waterside (Note) 602
Weske, John R., Estimation of Condenser Pressures of Naval Condensers 17
What Is Explosion Proof Electrical Equipment? by E. F. Seaman 48
Wood Preservation (Note) 267
World's Shipbuilding from 1893 to 1936, Table Showing (Note) .. Facing 262